

2024 Annual Conference on Theory and Applications of Models of Computation (TAMC 2024) Conference Program

Day 1 (May 13, 2024)	
9:00-10:00	Keynote: Some Mathematical Problems in Quantum Circuit Synthesis and Optimization. <i>Xiaoming Sun</i>
10:00-10:30	Tea Break
Session 1 (Chair: Aggeliki Chalki)	
10:30-10:50	Kleene Theorems for Lasso and ω -Languages. <i>Mike Cruchten</i>
10:50-11:10	A Coq-based Infrastructure for Quantum Programming, Verification and Simulation. <i>Wenxuan Tao and Gang Chen</i>
11:10-11:30	Energy and Output Patterns in Boolean Circuits. <i>Jayalal Sarma and Kei Uchizawa</i>
11:30-11:50	Quantum Path Parallelism: A Circuit-Based Approach to Text Searching. <i>Simone Faro, Arianna Pavone and Caterina Viola</i>
11:50-12:10	On Learning Families of Ideals in Lattices and Boolean Algebras. <i>Nikolay Bazhenov and Manat Mustafa</i>
Lunch	
Session 2 (Chair: Debajyoti Mondal)	
14:10-14:30	Lower Bounds for the Sum of Small-size Algebraic Branching Programs. <i>C. S. Bhargav, Prateek Dwivedi and Nitin Saxena</i>
14:30-14:50	An Improved Approximation Algorithm for Metric Triangle Packing. <i>Jingyang Zhao and Mingyu Xiao</i>
14:50-15:10	An Optimal and Practical Algorithm for the Planar 2-center Problem. <i>Xuehou Tan</i>
15:10-15:30	An Improved Kernel and Parameterized Algorithm for Almost Induced Matching. <i>Yuxi Liu and Mingyu Xiao</i>
15:30-15:50	On the Power of Counting the Total Number of Computation Paths of NPTMs. <i>Aggeliki Chalki, Aris Pagourtzis, Eleni Bakali, Sotiris Kanellopoulos and Stathis Zachos</i>
15:50-16:20	Tea break

Session 3 (Chair: Caterina Viola)	
16:20-16:40	A Local Search Algorithm for Radius-Constrained k-Median. <i>Gaojie Chi and Longkun Guo</i>
16:40-17:00	Approximation Algorithms for Robust Clustering Problems Using Local Search Techniques. <i>Chenchen Wu, Moehring Rolf, Yishui Wang, Dachuan Xu and Dongmei Zhang</i>
17:00-17:20	The Parameterized Complexity of Maximum Betweenness Centrality. <i>Šimon Schierreich and José Gaspar Smutný</i>
17:20-17:40	Improved Approximation Algorithm for the Distributed Lower-bounded k-center Problem. <i>Ting Liang, Qilong Feng, Xiaoliang Wu, Jinhui Xu and Jianxin Wang</i>
17:40-18:00	A Tight Threshold Bound for Search Trees with 2-way Comparisons. <i>Sunny Atalig and Marek Chrobak</i>
Day 2 (May 14, 2024)	
9:00-10:00	Keynote: On the Finite Character of Learnability: A Fundamental Theorem of Supervised Learning. <i>Shang-Hua Teng</i>
10:00-10:30	Tea Break
Session 4 (Chair: Chenchen Wu)	
10:30-10:50	Mechanism Design with Predictions for Facility Location Games with Candidate Locations. <i>Jiazhu Fang, Qizhi Fang, Wenjing Liu and Qingqin Nong</i>
10:50-11:10	Mechanism Design for Building Optimal Bridges between Regions. <i>Zining Qin, Hau Chan, Chenhao Wang and Ying Zhang</i>
11:10-11:30	On the 3-tree Core of Plane Graphs. <i>Debajyoti Mondal and Md. Saidur Rahman</i>
11:30-11:50	Time Efficient Implementation for Online k-server Problem on Trees. <i>Kamil Khadiev and Maxim Yagafarov</i>
11:50-12:10	Joint Bidding in Ad Auctions. <i>Yuchao Ma, Weian Li, Wanzhi Zhang, Yahui Lei, Zhicheng Zhang, Qi Qi, Qiang Liu and Xingxing Wang</i>
Lunch	

Session 5 (Chair: Shinichi Nakano)	
14:10-14:30	Some Combinatorial Algorithms on the Edge Cover Number of k -regular Connected Hypergraphs. <i>Zhongzheng Tang, Yaxuan Li and Zhuo Diao</i>
14:30-14:50	Parameterized Complexity of Weighted Target Set Selection. <i>Takahiro Suzuki, Kei Kimura, Akira Suzuki, Yuma Tamura and Xiao Zhou</i>
14:50-15:10	Offensive Alliances in Signed Graphs. <i>Zhidan Feng, Henning Fernau, Kevin Mann and Xingqin Qi</i>
15:10-15:30	Space-Efficient Graph Kernelizations. <i>Frank Kammer and Andrej Sajenko</i>
15:30-15:50	Counting on Rainbow k -connections. <i>Robert Barish and Tetsuo Shibuya</i>
15:50-16:20	Tea break
16:20-21:00	Photos and banquet
Day 3 (May 15, 2024)	
9:00-10:00	Keynote: Lightweight Algorithms to Learning Solutions for Large-scale Maximization. <i>My T. Thai</i>
10:00-10:30	Tea Break
Session 6 (Chair: Zhongzheng Tang)	
10:30-10:50	A Gray Code of Ordered Trees. <i>Shin-Ichi Nakano</i>
10:50-11:10	Unambiguous and Co-Nondeterministic Computations of Finite Automata and Pushdown Automata Families and the Effects of Multiple Counters. <i>Tomoyuki Yamakami</i>
11:10-11:30	Endogenous Threshold Selection with Two-Interval Restricted Tests. <i>Zeyu Ren and Yan Liu</i>
11:30-11:50	Source-Oblivious Broadcast. <i>Pierre Fraigniaud and Hovhannes Harutyunyan</i>
11:50-12:10	Tight Double Exponential Lower Bounds. <i>Ivan Bliznets and Markus Hecher</i>
12:10-12:20	Business Meeting/Closing Ceremony